

Building packages for

Tryton

Introduction to

Open Build Service

Axel Braun

(with material from OpenBuildService)



Axel Braun

docb@opensuse.org

axel.braun@gmx.de

@coogor

Dipl.-Ing, Dr.-Ing. Electrical engineering

Works as Consultant and Project Manager mostly for international companies

Lives in Düsseldorf/Germany

Member of openSUSE project

Package maintainer for (among others) Tryton and GNU Health (Live-CD)

Supported education project: Favela Education (.org)

Supported medical project: GNU Health



Open Build Service

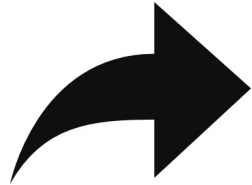
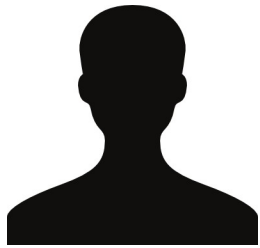
The easy way to packages



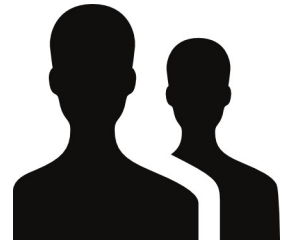
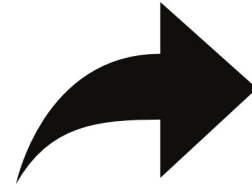


© - usesthis.com - CC-BY-SA 2.5
<http://usesthis.com/images/portraits/richard.stallman.jpg>





010011



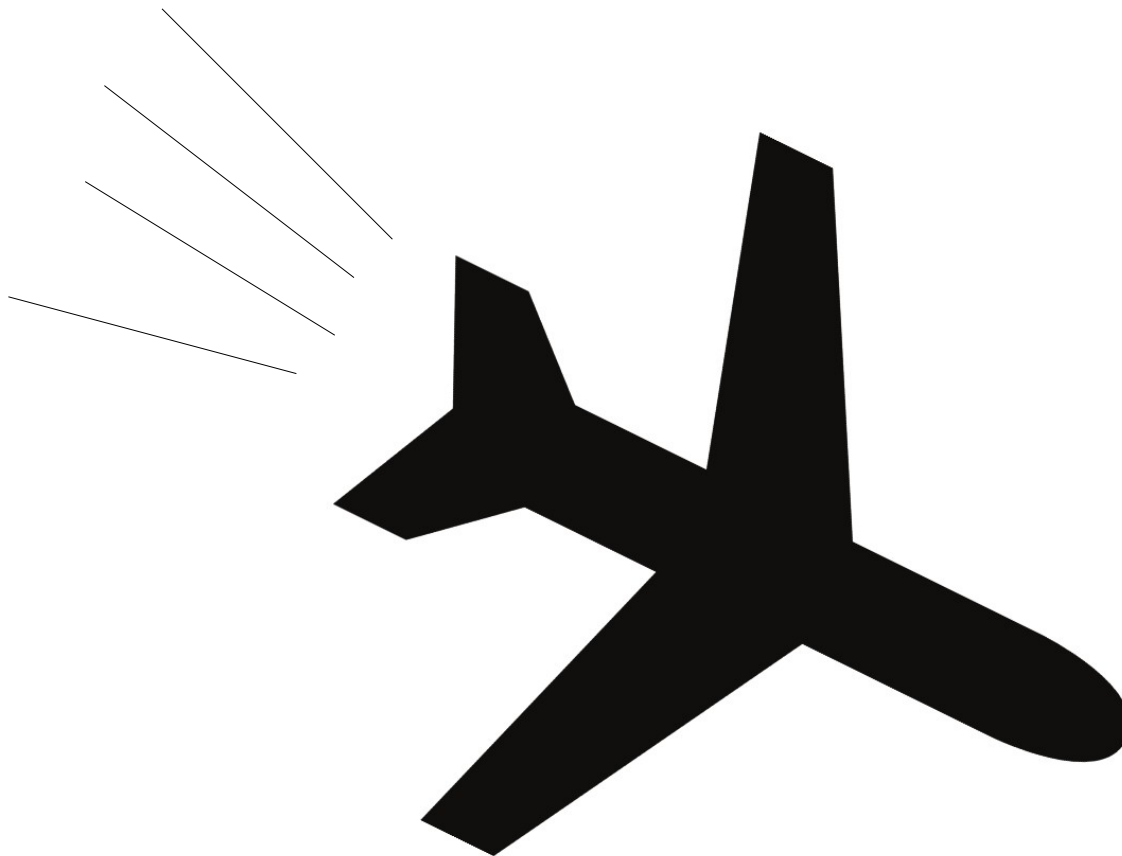
¿¿ whatever.tar.gz ??

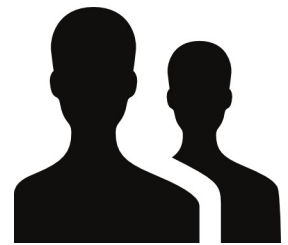
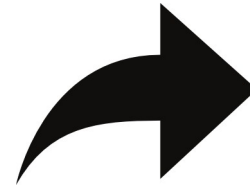
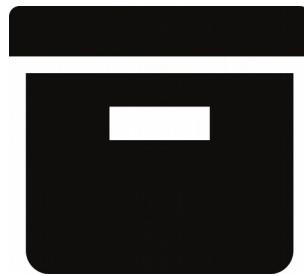
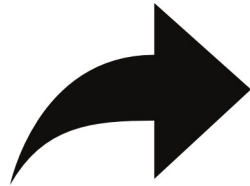
```
docb@T520:~> ./configure
```

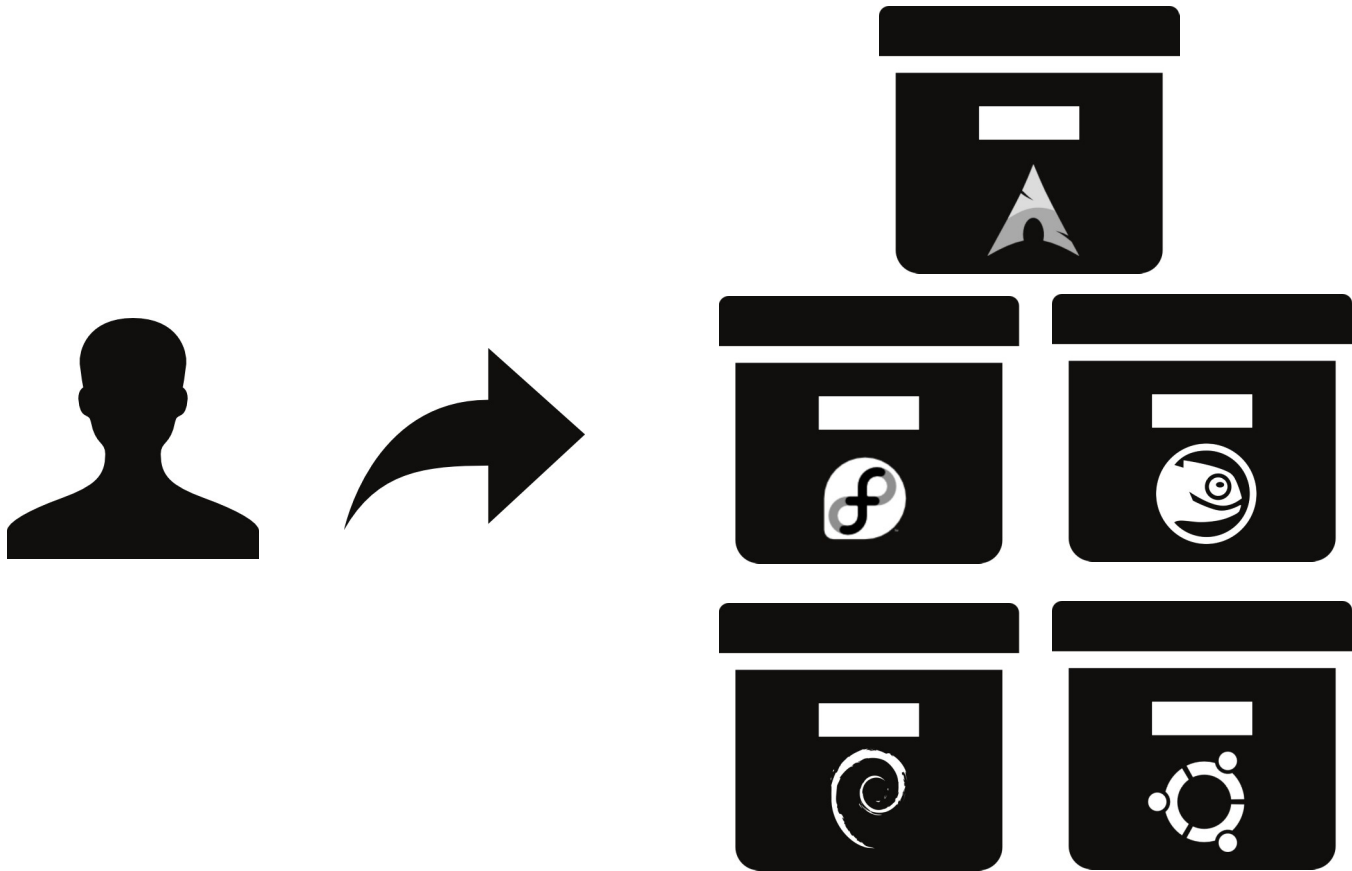
```
docb@T520:~> make
```

```
docb@T520:~> make install
```

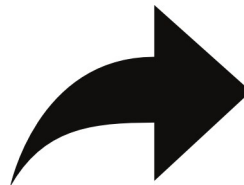
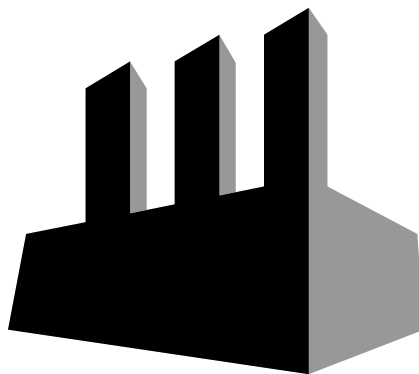
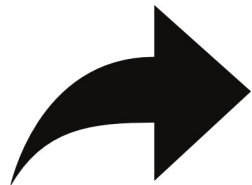
```
docb@T520:~> pip install
```







010011



Open Build Service

Meat and Potatoes

Formats



Distributions



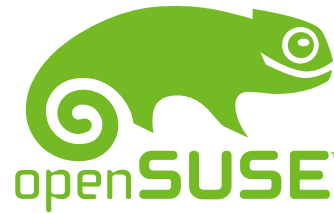
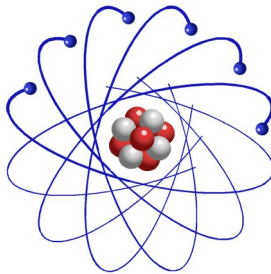
debian



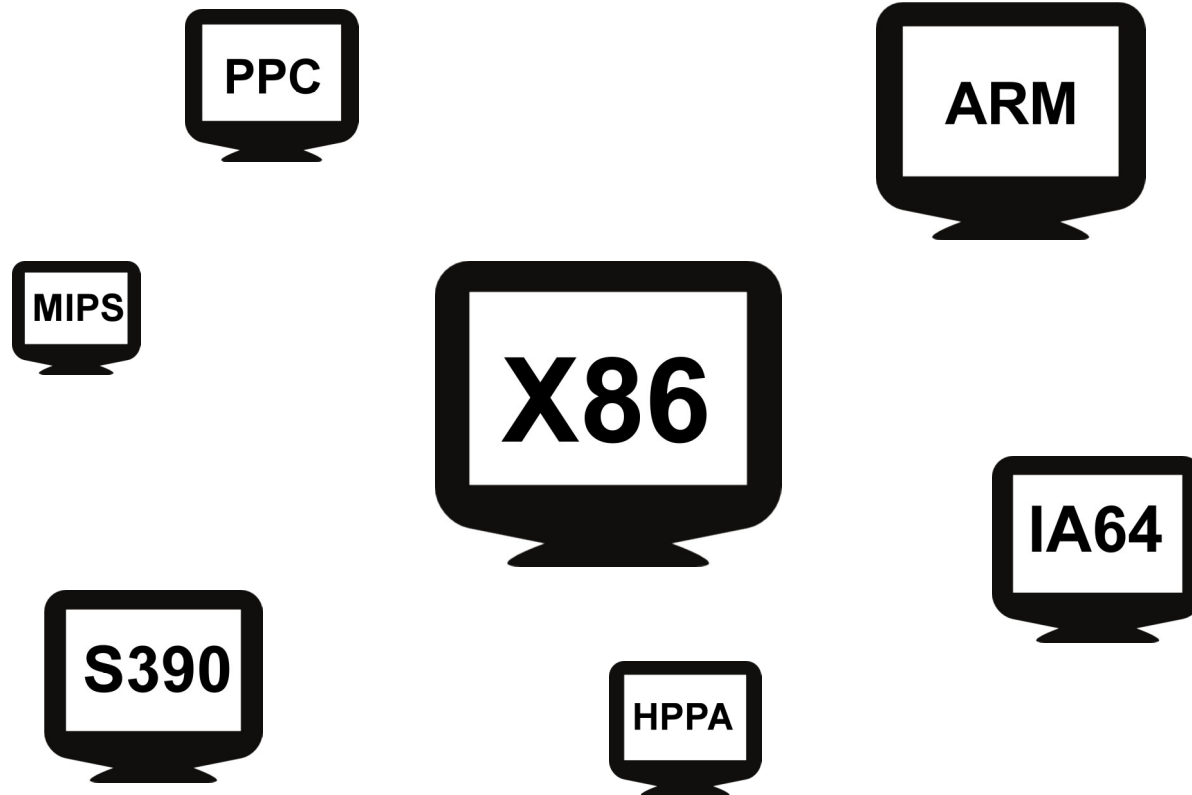
CentOS™



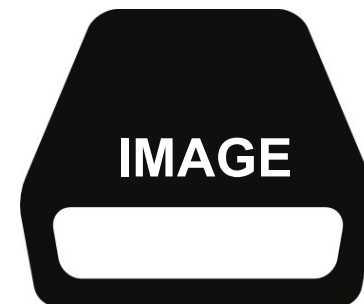
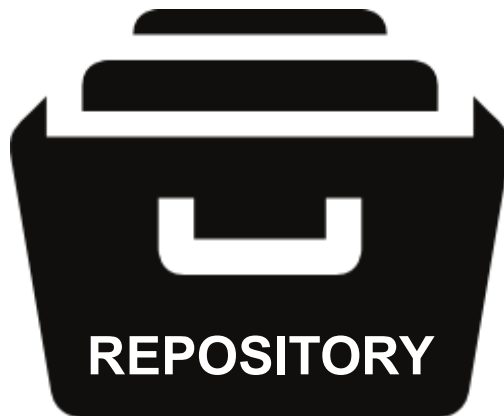
redhat®



Architectures

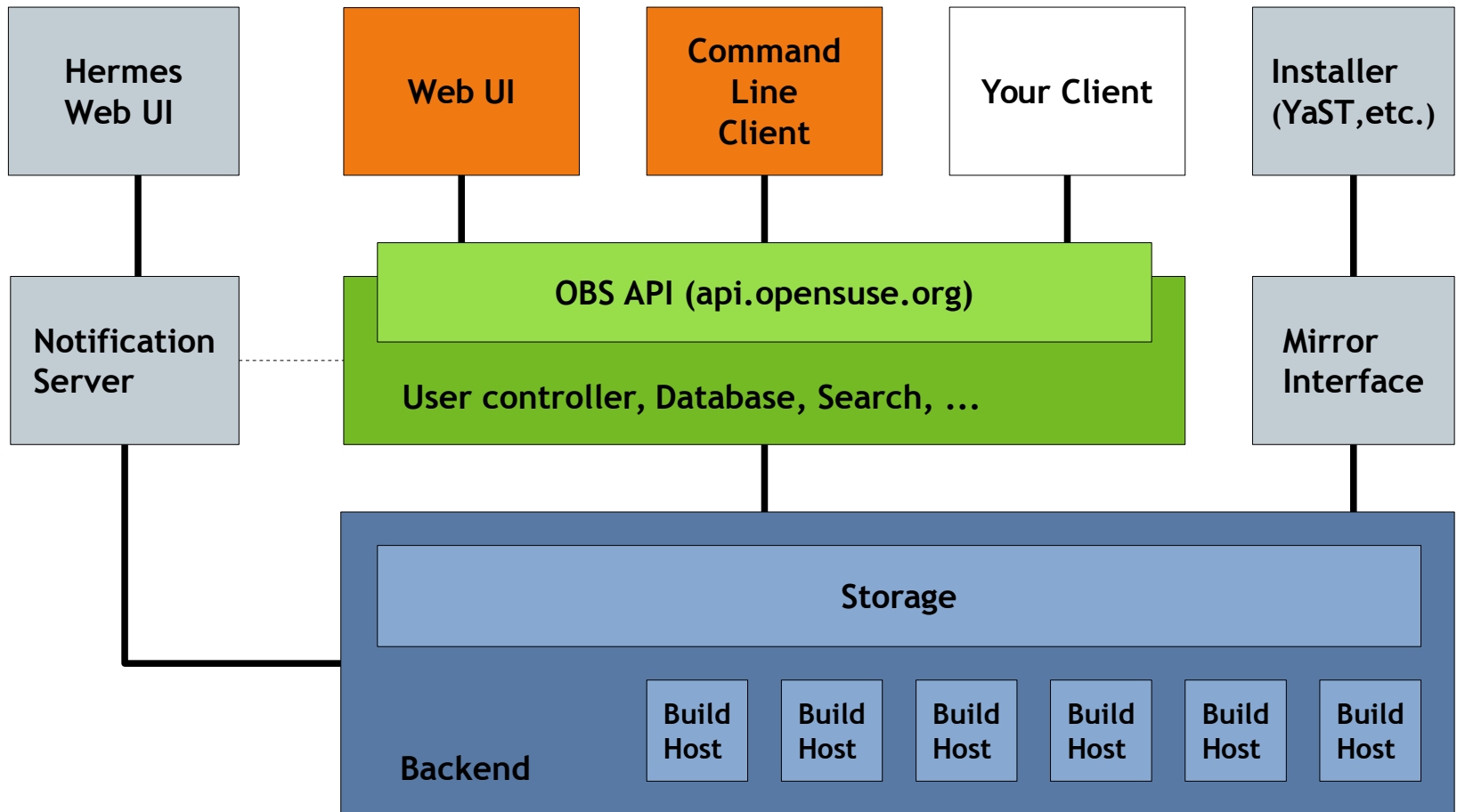


Output




Open Build Service Jumpstart

Overview



Project Model

[Downloads](#)[Support](#)[Community](#)[Development](#)[Watchlist](#)

[openSUSE Build Service](#) > [Projects](#) > [home:DocB](#) > [Overview](#)DocB (1 task) | [Home Project](#) | [Logout](#)

[Overview](#)[Repositories](#)[Monitor](#)[Requests](#)[Users](#)[Subprojects](#)[Advanced](#)

DocB's Projects

Various pieces of software that should run under openSUSE

[Create patchinfo](#) [Edit description](#) [Delete project](#)

5 build errors

Packages (10)

Search:

GarminPlugin

hylafax+

hylafax-plus

hylafax433

jbigkit

kmessagemodem

qtVlm

qtVlm_save

redir

tkusr


Showing 1 to 10 of 10 entries

[Create package](#) [Branch existing package](#)

Build Results

CentOS_CentOS-6	i586	succeeded: 2 failed: 2 unresolvable: 3 disabled: 3
	x86_64	succeeded: 2 failed: 2 unresolvable: 2 disabled: 4
Fedora_17	i586	succeeded: 2 failed: 2 unresolvable: 3 disabled: 3
	x86_64	succeeded: 2 failed: 2 unresolvable: 2 disabled: 4
Fedora_18	i586	succeeded: 2 failed: 2 unresolvable: 3 disabled: 3
	x86_64	succeeded: 2 failed: 2 unresolvable: 2 disabled: 4
RedHat_RHEL-6	i586	succeeded: 2 failed: 2 unresolvable: 3

Project Model – Build for repositories


 Downloads Support Community Development Watchlist

openSUSE Build Service > Projects > home:DocB > Add Repository DocB (1 task) | Home Project | Logout


Overview Repositories Monitor Requests Users Subprojects Advanced

Add Repositories to Project home:DocB


Please choose the repositories that your packages will be built for by following default list. Or [pick one via advanced interface](#).

 **openSUSE distributions**


☐ openSUSE Factory ☐ openSUSE 13.2 ☒ openSUSE 13.1 ☒ openSUSE 12.3 ☒ openSUSE 12.2 ☐ openSUSE Factory ARM
☐ openSUSE Tumbleweed

 **SUSE Linux Enterprise distributions**


☐ SUSE SLE-12 ☒ SUSE SLE-11 SP 3 ☒ SUSE SLE-11 SP 2 ☒ SUSE SLE-10

 **Arch distributions**

☒ Arch Core ☒ Arch Extra

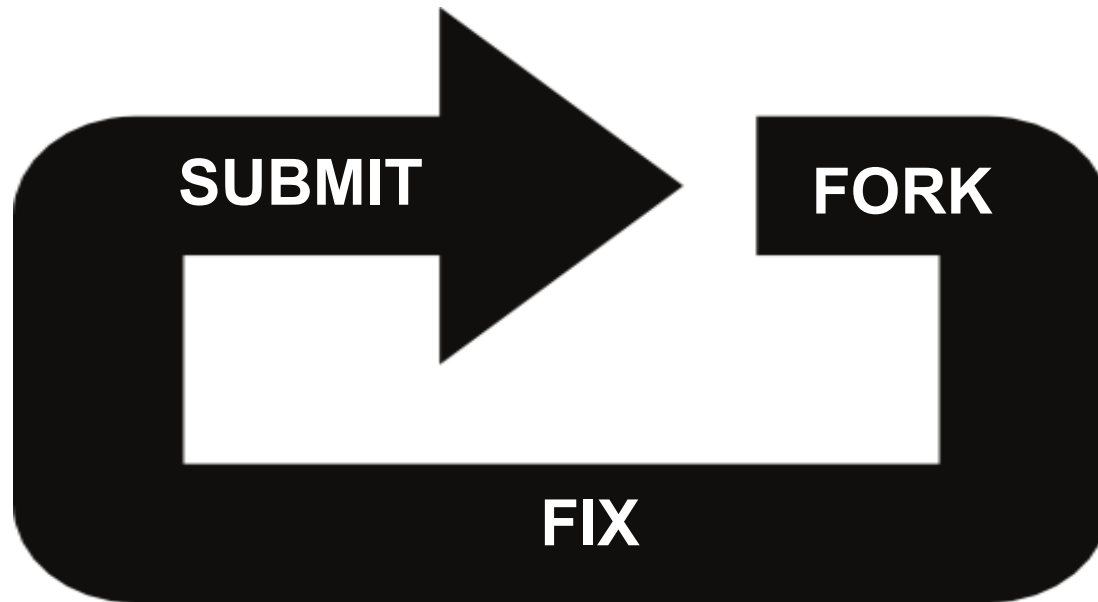
 **Debian distributions**

☐ Debian 7.0 ☐ Debian 6.0

 **Fedora distributions**

☐ Fedora 20 ☐ Fedora 19 ☒ Fedora 18

Collaboration



API

The screenshot shows the openSUSE Build Service web interface for the 'parrot' project. The browser address bar shows the URL: `https://build.opensuse.org/project/show?project=devel%3Alanguages%3Aparrot`. The page has a navigation bar with links: Downloads, Support, Community, Development, Watchlist, and a search bar. Below the navigation bar, the breadcrumb path is 'openSUSE Build Service > Projects > devel:languages:parrot'. The user 'mlschroe' is logged in, with links for 'Home Project' and 'Logout'. The main content area has tabs: Overview, Packages, Repositories, Monitor, Requests, Users, Subprojects, and Advanced. The 'Overview' tab is active, showing 'Parrot related packages' with a description: 'This project contains packages related to the parrot project (www.parrot.org)'. It also shows 'Information' with '4 packages' and '1 build error'. Below this is a 'My Actions' section with links: Report bug, Create package, Create subproject, Edit description, and Delete project. On the right, the 'Build Results' section shows a table of build results for three projects: Fedora_15, openSUSE_11.4, and openSUSE_Factory. Each project has two rows for different architectures (i586 and x86_64) with status counts for succeeded, disabled, failed, and errored. At the bottom right, there is a 'Sponsor' section with the AMD logo and the text 'Smarter Choice'.

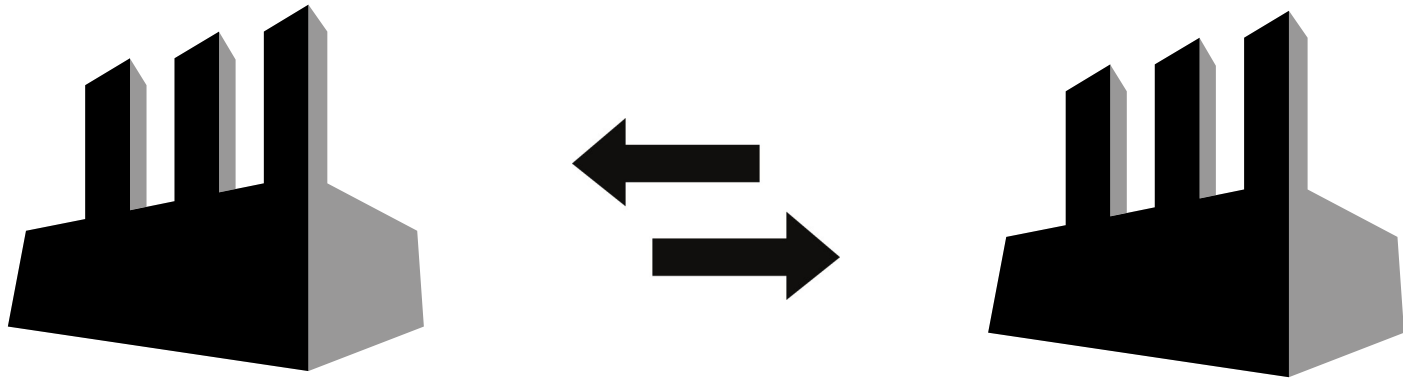
Project	Architecture	succeeded	disabled	failed	errored
Fedora_15	i586	3	1	0	0
	x86_64	3	1	0	0
openSUSE_11.4	i586	3	1	0	0
	x86_64	3	1	0	0
openSUSE_Factory	i586	2	1	1	1
	x86_64	3	1	0	0

```
rudin <32>
544 (rudin:devel:languages:parrot)> ls
nqp parrot rakudo
545 (rudin:devel:languages:parrot)> osc results
525 (rudin:devel:languages:parrot)> osc r
nqp
| parrot
| | post-build-checks
| | | rakudo
. . . Fedora_15 i586 (published)
. . . Fedora_15 x86_64 (published)
. . . openSUSE_11.4 i586 (published)
. . . openSUSE_11.4 x86_64 (published)
F . . openSUSE_Factory i586 (published)
. . . openSUSE_Factory x86_64 (published)

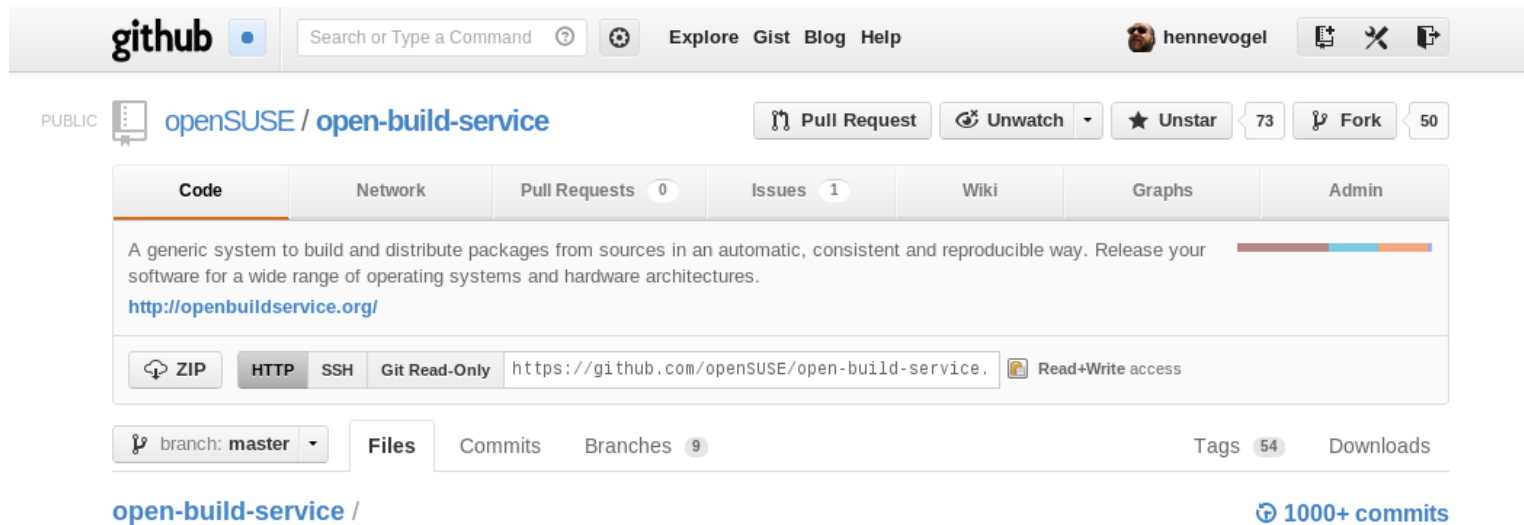
Legend:
disabled
. succeeded
F failed
546 (rudin:devel:languages:parrot)>
```



Interconnect



Open Source



The screenshot shows the GitHub interface for the `openSUSE / open-build-service` repository. At the top is the GitHub navigation bar with the logo, a search bar, and links for Explore, Gist, Blog, and Help. The user profile for `hennevogel` is visible on the right. Below the navigation bar, the repository name `openSUSE / open-build-service` is displayed, along with icons for Pull Request, Unwatch, Unstar, and statistics for forks (50) and stars (73). A tabbed interface shows `Code` as the active tab, with other tabs for Network, Pull Requests (0), Issues (1), Wiki, Graphs, and Admin. The description of the repository is: "A generic system to build and distribute packages from sources in an automatic, consistent and reproducible way. Release your software for a wide range of operating systems and hardware architectures." followed by the URL <http://openbuildservice.org/>. Below the description are buttons for ZIP, HTTP, SSH, and Git Read-Only, along with the repository URL `https://github.com/opensuse/open-build-service.` and a `Read+Write access` button. At the bottom, there is a branch selector set to `master`, and tabs for Files, Commits, and Branches (9). On the right, there are links for Tags (54) and Downloads. The repository path `open-build-service /` is shown at the bottom left, and a link to `1000+ commits` is at the bottom right.

github

Search or Type a Command

Explore Gist Blog Help

hennevogel

PUBLIC openSUSE / open-build-service

Pull Request Unwatch Unstar 73 Fork 50

Code Network Pull Requests 0 Issues 1 Wiki Graphs Admin

A generic system to build and distribute packages from sources in an automatic, consistent and reproducible way. Release your software for a wide range of operating systems and hardware architectures.

<http://openbuildservice.org/>

ZIP HTTP SSH Git Read-Only `https://github.com/opensuse/open-build-service.` Read+Write access

branch: master Files Commits Branches 9 Tags 54 Downloads

open-build-service / 1000+ commits



Open Build Service

Lets start

Creating Packages

1

- ✓ Create a package
- ✓ in your own home project
- ✓ on the reference server

Building Packages

2

- ✓ Build a package
- ✓ locally on your laptop
- ✓ and on the reference server

Collaborating on Packages

3

- ✓ Branch a package
- ✓ Submit a merge request
- ✓ Review a merge request

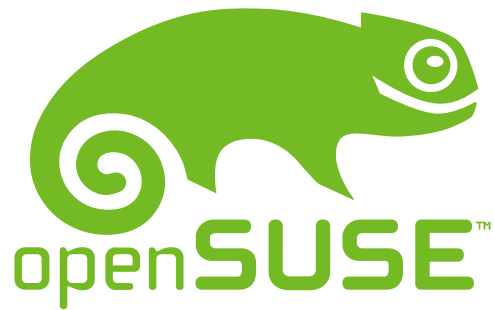
Open Build Service

Some statistics

Reference Server



Users

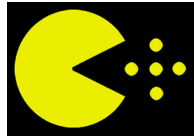


Users

- Distribution development, Maintenance Updates



- Open Source Communities



- Add-Ons: Driver Developer and ISVs



- Researchers/Universities
- Administration Teams



Numbers (from build.opensuse.org)

- Confirmed Users: >42.500
- Packages: >315.000
- Projects: >40.000
- Package builds per day: > 150.000
 - Build farm: ~40 hosts,
~450 workers
(HW upgrade already planned)
- Storage:
 - Sources: 11 TBytes
 - Binaries: 19 TBytes

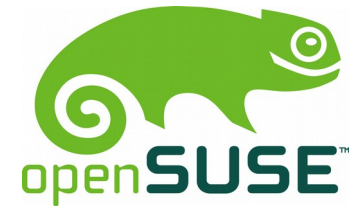


Support

- Community
 - opensuse-buildservice@opensuse.org
 - Irc: #opensuse-buildservice on freenode
- Professional

<http://www.open-build-service.org/contact/>

- B1 Systems (L3 backing by SUSE)



Kudos: The development team



Henne Vogelsang



Adrian Schröter

Stephan Kulow



Michael Schröder

Learn more about the
Open Build Service
www.openbuildservice.org

Thank you.

